STATE FOREST LAND
ENVIRONMENTAL CHECKLIST

Purpose of Checklist:

The State Environmental Policy Act (SEPA), chapter 43.21C RCW, requires all governmental agencies to consider the environmental impacts of a proposal before making decisions. An environmental impact statement (EIS) must be prepared for all proposals with probable significant adverse impacts on the quality of the environment. The purpose of this checklist is to provide information to help you and the agency identify impacts from your proposal (and to reduce or avoid impacts from the proposal, if it can be done) and to help the agency decided whether an EIS is required.

Instructions for Applicants:

This environmental checklist asks you to describe some basic information about your proposal. Governmental agencies use this checklist to determine whether the environmental impacts of your proposal are significant, requiring preparation of an EIS. Answer the questions briefly, with the most precise information known, or give the best description you can. *Questions in italics are supplemental to Ecology's standard environmental checklist. They have been added by the DNR to assist in the review of state forest land proposals. Adjacency and landscape/ watershed-administrative-unit (WAU) maps for this proposal are available on the DNR internet website at http://www.dnr.wa.gov under "SEPA Center." These maps may also be reviewed at the DNR regional office responsible for the proposal. This checklist is to be used for SEPA evaluation of state forest land activities.*

You must answer each question accurately and carefully, to the best of your knowledge. In most cases, you should be able to answer the questions from your own observations or project plans without the need to hire experts. If you really do not know the answer, or if a question does not apply to your proposal, write "do not know" or "does not apply." Complete answers to the questions now may avoid unnecessary delays later. *All of the questions are intended to address the complete proposal as described by your response to question A-11. The proposal acres in question A-11 may cover a larger area than the forest practice application acres, or the actual timber sale acres.*

Some questions ask about governmental regulations, such as zoning, shoreline, and landmark designations. Answer these questions if you can. If you have problems, the governmental agencies can assist you.

The checklist questions apply to all parts of your proposal, even if you plan to do them over a period of time or on different parcels of land. Attach any additional information that will help describe your proposal or its environmental effects. The agency to which you submit this checklist may ask you to explain your answers or provide additional information reasonably related to determining if there may be significant adverse impact.

Use of checklist for nonproject proposals:

Complete this checklist for nonproject proposals, even though questions may be answered " does not apply." IN ADDITION, complete the SUPPLEMENTAL SHEET FOR NON PROJECT ACTIONS (part D).

For nonproject actions, the references in the checklist to the words "project," "applicant," and "property or site" should be read as "proposal," "proposer" and "affected geographic area," respectively.

A. BACKGROUND

1. Name of proposed project, if applicable:

   Timber Sale Name:G-2500 CEDAR SALVAGE *Agreement #:30*-076286

2. Name of applicant: Washington State Department of Natural Resources

3. Address and phone number of applicant and contact person:
   Olympic Region — Contact Person: Barry Wikene
   411 Tillicum Lane — Telephone: (360) 374-6131
   Forks, WA 98331

4. Date checklist prepared: 9/14/2004

5. Agency requesting checklist: Washington State Department of Natural Resources

6. Proposed timing or schedule (including phasing, if applicable):

   a. Auction Date:2/16/05
   b. Planned contract end date (but may be extended):6/30/07
   c. Phasing:

7. Do you have any plans for future additions, expansion, or further activity related to or connected with this proposal? If yes, explain.

   Timber Sale

   a. Site preparation: No

   b. Regeneration Method: N/A

   c. Vegetation Management: N/A

   d. Thinning: No

   Roads: No

   Rock Pits and/or Sale: No

   Other:

8. List any environmental information you know about that has been prepared, or will be prepared, directly related to this proposal.

☒*303 (d) – listed water body in WAU:* ☐*temp* ☐*sediment* ☐*completed TMDL (total maximum daily load):*
☐*Landscape plan:*
☐*Watershed analysis:*
☐*Interdisciplinary team (ID Team) report:*
☐*Road design plan:*
☐*Wildlife report:*
☐*Geotechnical report:*
☐*Other specialist report(s):*
☐*Memorandum of understanding (sportsmen's groups, neighborhood associations, tribes, etc.):*
☐*Rock pit plan:*
☒*Other:* Final Forest Resource Plan (July 1992); Final Habitat Conservation Plan (September 1997); State Soil Survey; South Coast Marbled Murrelet Habitat Model; Forestry Handbook (August 1999)

Documents are available for viewing at the Olympic Region office during the SEPA comment period.

9. Do you know whether applications are pending for governmental approvals of other proposals directly affecting the property covered by your proposal? If yes, explain.
No

10. List any government approvals or permits that will be needed for your proposal, if known.

☐*HPA* ☐*Shoreline permit* ☒*Incidental take permit* ☒*FPA* ☒*Other: Board of Natural Resources*

11. Give brief, complete description of our proposal, including the proposed uses and the size of the project and site. There are several questions later in this checklist that ask you to describe certain aspects of your proposal. You do not need to repeat those answers on this page. (Lead agencies may modify this form to include specific information on project description.)

a. *Complete proposal description:*
This proposal contains approximately 412 acres of cedar salvage. It is located in Sections 4, 5, 6, 7, 8, and 9 of Township 27 North, Range 13 West, W.M. There are 14 streams associated with this sale. The streams will be protected with 50 foot no cut Riparian Management Zone (RMZ) buffers. Salvage will be allowed within forested wetlands, but the material must be removed whole to prevent movement during storm events. The streams associated with this proposal flow into Goodman Creek drainage to the south or the Maxfield Creek drainage to the north. Goodman Creek flows directly into the Pacific Ocean and Maxfield Creek is a tributary to the Bogachiel River. There is approximately 310 Mbf or 412 cords of cedar to be salvaged from this proposal. The area involved is a mix of different aged stands ranging from 10 to 25 years of age. The stands are a mix of Douglas fir, western hemlock and western red cedar. Some of the stands have been pre-commercial thinned. There will be no new roads constructed with this proposal. A monitoring study will be part of this sale. This study is designed to measure the course woody debris (CWD) before and after the salvage. Permanent plots will be established prior to the salvage. Measurements at the plots to determine the amount, size and distribution of CWD within the salvage will be taken before and after the operation. While it has been determined that CWD is important to the Northern Spotted Owl, the quantity of CWD has never been established. Measurements of CWD before and after the salvage will create a baseline of data that will assist in determining if the salvage operation had a substantial impact on CWD over the length of a rotation.

b. *Timber stands description pre-harvest (include major timber species and origin date), type of harvest, overall unit objectives.*
This area was harvested from the mid 1970's to the early 1990's. The stands now range in age from 10 to 25 years. They are a mix of Douglas fir, western hemlock and western red cedar. Some of the stands have already been pre-commercial thinned. Throughout the area is a large amount of downed and dead old growth cedar and cedar stumps. These areas were not burned after harvest so there is a lot of material on the ground. This proposal is to salvage the downed cedar. The material salvaged will be removed using helicopters and hand packing methods. No equipment will be allowed to leave the existing roads. The objective is to manage the area as forestland to produce revenue, provide wildlife habitat, maintain the hydrology, and maintain long-term soil productivity.

c. *Road activity summary. See also forest practice application (FPA) for maps and more details.*

Type of Activity	How Many	Length (feet) (Estimated)	Acres (Estimated)	Fish Barrier Removals (#)
Construction		N/A	N/A	0
Reconstruction		N/A		0
Abandonment		N/A	N/A	0
Bridge Install/Replace	0			0
Culvert Install/Replace (fish)	0			0
Culvert Install/Replace (no fish)	0			

12. Location of proposal. Give sufficient information for a person to understand the precise location of your proposed project, including a street address, if any, and section, township, and range, if known. If a proposal would occur over a range of area, provide the range or boundaries of the site(s). Provide a legal description, site plan, vicinity map, and topographic map, if reasonably available. While you should submit any plans required by the agency, you are not required to duplicate maps or detailed plans submitted with any permit applications related to this checklist. *(See timber sale map. See also color landscape/WAU map on the DNR website http://www.dnr.wa.gov under "SEPA Center.")*

a. Legal description:

T27N R13W S4,5,6,7,8, and 9, W.M.

b. *Distance and direction from nearest town (include road names):*
This sale is located approximately ten miles south of Forks, Washington off Highway 101 on the G-2000/G2400/G-2500 road systems.

c. *Identify the watershed administrative unit (WAU), the WAU Sub-basin(s), and acres. (See also landscape/WAU map on DNR website http://www.dnr.wa.gov under " SEPA Center.")*

WAU Name	WAU Acres	Proposal Acres

GOODMAN-MOSQUITO	32840	244
BOGACHIEL	50232	168

13. *Discuss any known future activities not associated with this proposal that may result in a cumulative change in the environment when combined with the past and current proposal(s). (See digital ortho-photos for WAU and adjacency maps on DNR website http://www.dnr.wa.gov under "SEPA Center" for a broader landscape perspective.)*
This proposal lies within the Goodman-Mosquito and Bogachiel WAU's. In the Goodman- Mosquito WAU there is approximately 32,840 acres, of which the DNR manages approximately 12,461 acres, or about 38%. The National Park Service has 10% and the remaining 52 % is private land. Forest stands outside the National Park have been heavily managed for the past 25 to 30 years. The stands within the WAU are mostly second growth consisting of a mix of Douglas fir, western hemlock and western red cedar. There has been little activity on private lands within the WAU in the past 10 years with the exception of a small regeneration harvest unit to the west of the proposal. The activities on the DNR managed lands within the WAU have been limited to pre-commercial and commercial thinning. Within the Bogachiel WAU there is approximately 50,232 acres, of which the DNR manages approximately 18,971 acres, or about 38%. The National Park Service owns about 5%, the National Forest Service about 11%, private land is about 45%, while the BLM, WDFW, and Washington State Parks together own about 1%. Forest stands outside the National Park Service lands have been heavily managed. Most of the private land is in various stages of second and third growth stands. These stands consist mostly of a mix of Douglas fir, western hemlock and western red cedar. These stands range in age from newly planted to 40 years. There has been a considerable amount of harvest in the northwestern part of the WAU on private ground. Harvest on DNR managed lands has been limited to blowdown salvage and commercial thinning.

The DNR has an HCP agreement with the federal government concerning threatened and endangered species and their habitats, which requires the department to manage landscapes with the intent to preserve and enhance habitat used by fish and older forest dependent species. This agreement substantially helps the department to mitigate for any potential harmful cumulative effects related to its management activities. The HCP is designed to protect and promote fish and wildlife species and their habitats over a broad regional area. The applicable HCP strategies incorporated into this proposal are as follows:

- Retaining Riparian Management Zones (RMZ's) on all typed streams,
- Complying with the interim marbled murrelet strategy,
- Analyzing, designing, and maintaining a road system to minimize potential adverse effects on the environment,
- Complying with the Spotted Owl strategy.

Several measures have been taken to ensure that this proposal will not contribute to adverse environmental impacts through cumulative effects. 50-foot no cut (RMZ) buffers are being applied to protect all streams. There will be no salvage activities within the buffers. RMZ's protect water quality, stream bank integrity, hydrology, sensitive soils, and habitat for riparian species. They also provide large woody debris (LWD) recruitment and habitat for riparian species. Furthermore, the RMZ's will develop old-forest characteristics that, in combination with other strategies, will help support old-forest dependant wildlife populations in the future. Salvage will be allowed within forested wetlands, but the material must be removed whole to prevent movement during storm events. A monitoring study will be part of this sale. This study is designed to measure the course woody debris (CWD) before and after the salvage. Permanent plots will be established prior to the salvage. Measurements at the plots to determine the amount, size and distribution of CWD within the salvage will be taken before and after the operation. While it has been determined that CWD is important to the Northern Spotted Owl, the quantity of CWD has never been established. Measurements of CWD before and after the salvage will create a baseline of data that will assist in determining if the salvage operation had a substantial impact on CWD over the length of a rotation.

Existing roads will be maintained to divert storm water onto stable forest floor to prevent delivery of sediment to live streams. To protect soil productivity and reduce erosion, no equipment will be allowed to leave the existing roads, and all salvaged material will be removed with aerial or hand methods. There will be no new roads constructed in conjunction with this proposal. These measures will minimize harvest and road impacts on the environment.

Operational timing restrictions and restricted flight paths are being applied to this sale to reduce disturbance to adjacent marbled murrelet habitat.

B. ENVIRONMENTAL ELEMENTS

1. Earth

a. General description of the site (check one):

☐Flat, ☒Rolling, ☐Hilly, ☐Steep Slopes, ☐Mountainous, ☐Other:

1) *General description of the WAU or sub-basin(s) (landforms, climate, elevations, and forest vegetation zone).*
The Goodman-Mosquito WAU is made up of mostly rolling hills and gentle valleys. Goodman Creek drains the northern half of the WAU while Mosquito Creek drains the southern half. Over half of the WAU lies in the lowland zone with elevations ranging from sea level to 1500 ft., with the mean elevation being 525 ft. The annual rainfall averages from 80 to 120 inches per year. The major timber type in the WAU is western hemlock, with some Douglas fir and red cedar.

The Bogachiel WAU is made up of gentle hill to the west and steeper more rugged ground to the east. The Bogachiel River drains most of the WAU, with the exception of a few small streams that drain directly into the Pacific Ocean. Over half of the WAU lies within the lowland zone, while approximately 1200 acres is within the rain on snow zone. The elevations range from sea level to 2000 ft. with the mean elevation at 486 ft. The annual rainfall ranges from 80 to 120 inches per year. The major timber type in the WAU is western hemlock, with some Douglas fir and red cedar.

2) *Identify any difference between the proposal location and the general description of the WAU or sub-basin(s).*
This proposal is located on flat to gently rolling ground at an elevation of approximately 500 ft.

b. What is the steepest slope on the site (approximate percent slope)?
30% slopes on 10% of the area

c. What general types of soils are found on the site (for example, clay, sand, gravel, peat, muck)? If you know the classification of agricultural soils, specify them and note any prime farmland. *Note: The following table is created from state soil survey data. It is a roll-up of general soils information for the soils found in the entire sale area. It is only one of several site assessment tools used in conjunction with actual site inspections for slope stability concerns or erosion potential. It can help indicate potential for shallow, rapid soil movement, but often does not represent deeper soil sub-strata. The actual soils conditions in the sale area may*

vary considerably based on land-form shapes, presence of erosive situations, and other factors. The state soil survey is a compilation of various surveys with different standards.

State Soil Survey #	Soil Texture or Soil Complex Name	% Slope	Acres	Mass Wasting Potential	Erosion Potential
3311	SILT LOAM	15-35	69	LOW	MEDIUM
8018	SLT.CLY.LOAM	0-5	50	LOW	LOW
0902	SILT LOAM	0-15	293	LOW	LOW

d. Are there surface indications or history of unstable soils in the immediate vicinity? If so, describe.

1) *Surface indications:*
None known or observed. The landforms in the sale area are flat and the stream banks are stable.

2) *Is there evidence of natural slope failures in the sub-basin(s)?*
☐*No* ☒*Yes, type of failures (shallow vs. deep-seated) and failure site characteristics:*
There is evidence of natural slope failures occurring along major streams and rivers in the WAU due to undercutting of the banks during high water events.

3) *Are there slope failures in the sub-basin(s) associated with timber harvest activities or roads?*
☒*No* ☐*Yes, type of failures (shallow vs. deep-seated) and failure site characteristics:*
Associated management activity:
None observed.

4) *Is the proposed site similar to sites where slope failures have occurred previously in the sub-basin(s)?*
☒*No* ☐*Yes, describe similarities between the conditions and activities on these sites:*
The terrain within the sale and along the stream banks is nearly flat to gently rolling.

5) *Describe any slope stability protection measures (including sale boundary location, road, and harvest system decisions) incorporated into this proposal.*
There will be no salvage within 50 feet of any typed water. There will be no new road construction allowed and no equipment will be allowed to leave the road surface. All material removed will be by hand or aerial methods.

e. Describe the purpose, type, and approximate quantities of any filling or grading proposed. Indicate source of fill.
Approx. acreage new roads:N/A Approx. acreage new landings:N/A Fill source: N/A
There will be no new roads or landings created with this proposal.

f. Could erosion occur as a result of clearing, construction, or use? If so, generally describe.
Yes, minimal erosion may occur as the result of road use and salvage operations.

g. About what percent of the site will be covered with impervious surfaces after project construction (for example, asphalt or buildings)? *Approximate percent of proposal in permanent road running surface (includes gravel roads):*
None

h. Propose measures to reduce or control erosion, or other impacts to the earth, if any:
(Include protection measures for minimizing compaction or rutting.)

To reduce erosion, roads will be maintained with properly located ditches, ditch outs and cross drains to divert water onto stable forest floor and/or into stable natural drainages. No equipment will be allowed to leave the existing roads. Riparian management zones averaging 50 feet wide have been incorporated into the sale design to decrease the possibility of sediment delivery, loss of stream function, and maintain stream bank integrity.

2. Air

a. What types of emissions to the air would result from the proposal (i.e., dust *from truck traffic, rock mining, crushing or hauling,* automobile, odors, industrial wood smoke) during construction and when the project is completed? If any, generally describe and give approximate quantities if known.
None

b. Are there any off-site sources of emissions or odor that may affect your proposal? If so, generally describe.
None

c. Proposed measures to reduce or control emissions or other impacts to air, if any:
None

3. Water

a. Surface:

1) Is there any surface water body on or in the immediate vicinity of the site (including year-round and seasonal streams, saltwater, lakes, ponds, wetlands)? If yes, describe type and provide names. If appropriate, state what stream or river it flows into. *(See timber sale map and forest practice base maps.)*

a) *Downstream water bodies:*
Mosquito Creek drains into Goodman Creek, which flows directly into the Pacific Ocean. The Bogachiel River flows into a juncture of rivers forming the Quillayute River, which flows into the Pacific Ocean.

b) *Complete the following riparian & wetland management zone table:*

Wetland, Stream, Lake, Pond, or Saltwater Name (if any)	Water Type	Number (how many?)	Avg RMZ/WMZ Width in Feet (per side for streams)
Stream	3	4	50
Stream	4	5	50
Stream	5	5	50

c) *List RMZ/WMZ protection measures including silvicultural prescriptions, road-related RMZ/WMZ protection measures, and wind buffers.*

All typed waters within the sale area will be protected with 50 foot no cut RMZ buffers. These buffers are to protect the streams from spaults entering and plugging or diverting the stream channels. There are no wind buffers applied because the proposal is only salvaging downed cedar. Within the forested wetlands any salvaged material must be removed whole so as to prevent spaults from entering any typed waters.

2) Will the project require any work over, in, or adjacent to (within 200 feet) to the described waters? If yes, please describe and attach available plans.
☐*No* ☒*Yes (See RMZ/WMZ table above and timber sale map.)*
Description (include culverts):
As described above there will be no salvage within 50 feet of any typed waters and whole removals will be allowed within forested wetlands.

3) Estimate the amount of fill and dredge material that would be placed in or removed from surface water or wetlands and indicate the area of the site that would be affected. Indicate the source of fill material.
None

4) Will the proposal require surface water withdrawals or diversions? Give general description, purpose, and approximate quantities if known. *(Include diversions for fish-passage culvert installation.)*
☒*No* ☐*Yes, description:*

5) Does the proposal lie within a 100-year floodplain? If so, note location on the site plan.
☒*No* ☐*Yes, describe location:*

6) Does the proposal involve any discharges of waste materials to surface waters? If so, describe the type of waste and anticipated volume of discharge.
☒*No* ☐*Yes, type and volume:*

7) Does the sub-basin contain soils or terrain susceptible to surface erosion and/or mass wasting? What is the potential for eroded material to enter surface water?
Yes. Approximately 15% of the WAU has high soil erosion potential and 6% has a high mass wasting potential. The potential for eroded material to enter surface water based on this proposal is low due to the low to medium erosion potential of the soils on the site and the control measures being included in the proposal (see B.1.h.).

8) Is there evidence of changes to the channels in the WAU and sub-basin(s) due to surface erosion or mass wasting (accelerated aggradations, erosion, decrease in large organic debris (LOD), change in channel dimensions)?
☐*No* ☒*Yes, describe changes and possible causes:*
There is evidence of surface erosion and mass wasting along the banks of major streams and rivers located in the WAU. Elevated streambeds attributed to accelerated aggradations of sediment in the channels are the main indicator of channel changes in the WAU. There is also a general decrease in the amount of LWD in streams that were not buffered during past harvest activities which has contributed to a decrease in recruitment and the natural decay process removing existing LWD. Where the stream banks erode, as described above, the channels may change dimension and/or direction over time, but again this is associated with the major streams and rivers in the WAU and is not associated with the streams adjacent to this proposal.

9) Could this proposal affect water quality based on the answers to the questions 1-8 above?
☐*No* ☒*Yes, explain:*
The RMZ and other items listed in B.1.h., B.3.a.1.c above and B.3.d. below will minimize sediment delivery to streams. These mitigation elements should limit any effects on water quality in relation to the items of concern revealed in questions 1-8.

10) What are the approximate road miles per square mile in the WAU and sub-basin(s)?
Goodman-Mosquito-3.5 Bogachiel-3.1
Are you aware of areas where forest roads or road ditches intercept sub-surface flow and deliver surface water to streams, rather than back to the forest floor?
☐*No* ☒*Yes, describe:*
Of the roads observed in the WAU, only a small portion of the roads intercept sub-surface flow and deliver it to streams. In recent years an emphasis has been placed on using more cross-drain culverts both on new road construction and on existing road reconstruction. This has resulted in more ditch water being diverted back to the forest floor.

*11) Is the proposal within a significant rain-on-snow (ROS) zone? If not, **STOP HERE** and go to question B-3-a-13 below. Use the WAU or sub-basin(s) for the ROS percentage questions below.*
☒*No* ☐*Yes, approximate percent of WAU in significant ROS zone.*
Approximate percent of sub-basin(s):

12) If the proposal is within the significant ROS zone, what is the approximate percentage of the WAU or sub-basin(s) within the significant ROS zone (all ownerships) that is (are) rated as hydrologically mature?
N/A

13) Is there evidence of changes to channels associated with peak flows in the WAU or sub-basin(s)?
☐*No* ☒*Yes, describe observations:*
As described above, some of the banks along the major streams and rivers can erode during periods of high water. The mass wasting described in B.1.d.2. above occurs during peak flow events and can result in accelerated sediment aggradations. Lack of LWD can contribute to stream channelization during peak flow events.

14) Based on your answers to questions B-3-a-10 through B-3-a-13 above, describe whether and how this proposal, in combination with other past, current, or reasonably foreseeable proposals in the WAU and sub-basin(s), may contribute to a peak flow impact.
Given that this proposal involves salvage of down and dead material, this contribution to peak flow events should be minimal. The current overstory of brush and trees species will not be altered.

15) Is there water resource (public, domestic, agricultural, hatchery, etc.), or area of slope instability, downstream or downslope of the proposed activity that could be affected by changes in surface water amounts, quality, or movements as a result of this proposal?

☒*No* ☐*Yes, possible impacts:*
There is a hatchery downstream from this proposal on the Bogachiel River, but there should be no impacts.

16) *Based on your answers to questions B-3-a-10 through B-3-a-15 above, note any protection measures addressing possible peak flow/flooding impacts.*
Recent increases in the number and spacing of culverts to divert water to the forest floor have been accomplished. Retaining large RMZ's on streams that maintain bank stability, provide LWD, and reduce impacts to hydrologic function. See B.1.h , B.3.a.1.c and A.13.

b. Ground *Water*:

1) Will ground water be withdrawn, or will water be discharged to ground water? Give general description, purpose, and approximate quantities if known.
No

2) Describe waste material that will be discharged into the ground from septic tanks or other sources, if any (for example: Domestic sewage; industrial, containing the following chemicals; agricultural; etc.). Describe the general size of the system, the number of such systems, the number of houses to be served (if applicable), or the number of animals or humans the system(s) are expected to serve.
No

3) *Is there a water resource use (public, domestic, agricultural, hatchery, etc.), or area of slope instability, downstream or down slope of the proposed activity that could be affected by changes in groundwater amounts, timing, or movements as a result this proposal?*
☒*No* ☐*Yes, describe:*
There is a hatchery downstream from this proposal on the Bogachiel River, but there should be no impacts.

a) *Note protection measures, if any.*
All streams areas are well protected with appropriate buffers and all ditch water will be directed to stable forest floor. See B.3.a.1.c and A.13.

c. Water Runoff (including storm water):

1) Describe the source of runoff (including storm water) and method of collection and disposal, if any (include quantities, if known). Where will this water flow? Will this water flow into other waters? If so, describe.
Storm water runoff will be collected by road ditches and diverted through cross drain culverts onto the forest floor.

2) Could waste materials enter ground or surface waters? If so, generally describe.
No
a) *Note protection measures, if any.*
Does Not Apply

d. Proposed measures to reduce or control surface, ground, and runoff water impacts, if any:
(See surface water, ground water, and water runoff sections above, questions B-3-a-1-c, B-3-a-16, B-3-b-3-a, and B-3-c-2-a.)

4. Plants

a. Check or circle types of vegetation found on the site:

☒Deciduous tree: ☒alder, ☐maple, ☐aspen, ☒*cottonwood,* ☐*western larch,* ☐*birch,* ☐other:
☒Evergreen tree: ☒*Douglas fir,* ☐*grand fir,* ☐*Pacific silver fir,* ☐*ponderosa pine,* ☐*lodgepole pine,* ☒*western hemlock,* ☐*mountain hemlock,* ☐*Englemann spruce,* ☒*Sitka spruce,* ☒*red cedar,* ☐*yellow cedar,* ☐other:
☒shrubs: ☒*huckleberry,* ☒*salmonberry,* ☒*salal,* ☐*other:*
☐grass
☐pasture
☐crop or grain
☒wet soil plants: ☐cattail, ☐buttercup, ☐bullrush, ☒skunk cabbage, ☒*devil's club,* ☐other:
☐water plants: ☐water lily, ☐eelgrass, ☐milfoil, ☐other:
☐other types of vegetation:
☐*plant communities of concern:*

b. What kind and amount of vegetation will be removed or altered? *(See answers to questions A-11-a, A-11-b, B-3-a-1-b and B-3-a-1-c. The following sub-questions merely supplement those answers.)*

1) *Describe the species, age, and structural diversity of the timber types immediately adjacent to the removal area. (See landscape/WAU and adjacency maps on the DNR website at: http://www.dnr.wa.gov under "SEPA Center.")*
The stands around the proposal vary in age from 10 years to old growth timber. To the west of the site is private land that has been cut over. Most of the stands are 10 to 20 years. To the east is mostly the same age class and species, but there are also scattered stands of old growth cedar and hemlock. Some of the stands have already been pre-commercial thinned.
2) *Retention tree plan:*
Does Not Apply

c. List threatened or endangered *plant* species known to be on or near the site.

TSU Number	FMU_ID	Common Name	Federal Listing Status	WA State Listing Status
None Found in Database Search				

d. Proposed landscaping, use of native plants, or other measures to preserve or enhance vegetation on the site, if any:
As this proposal is a cedar salvage the only removal will be down and dead cedar. The plants in the sale area will have minimal disturbance. The spaults will be stacked as to avoid covering large areas of the ground.

5. Animal

a. Circle or check any birds animals *or unique habitats* which have been observed on or near the site or are known to be on or near the site:

birds: ☒hawk, ☐heron, ☐eagle, ☒songbirds, ☐*pigeon*, ☐other:
mammals: ☒deer, ☒bear, ☒elk, ☐beaver, ☐other:
fish: ☐bass, ☐salmon, ☒trout, ☐herring, ☐shellfish, ☐other:
unique habitats: ☐*talus slopes*, ☐*caves*, ☐*cliffs*, ☐*oak woodlands*, ☐*balds*, ☐*mineral springs*

b. List any threatened or endangered species known to be on or near the site *(include federal- and state-listed species).*

TSU Number	FMU_ID	Common Name	Federal Listing Status	WA State Listing Status
1	3709	SPOTTED OWL: Site:19-ANDERSON RIDGE	THREATENED	ENDANGERED
1	3711	SPOTTED OWL: Site:237-MINTER CREEK	THREATENED	ENDANGERED
1	3763	WINTER STEELHEAD	THREATENED	CANDIDATE
1	3764	MARBELED MURRELET: Reference No: 960790	THREATENED	THREATENED
1	3900	WINTER STEELHEAD	THREATENED	CANDIDATE

c. Is the site part of a migration route? If so, explain.
☒*Pacific flyway* ☐*Other migration route:* *Explain if any boxes checked:*
This proposal is located in the Pacific flyway, but is not known to be used as a resting or feeding area by migratory waterfowl. There was no open water observed in the associated wetlands.

d. Proposed measures to preserve or enhance wildlife, if any:
As there are occupied Marbled Murrelet stands adjacent to the salvage unit, there will be timing restrictions and flight restrictions applied to reduce impacts to the Marbled Murrelet habitat.
A monitoring study will be part of this sale. This study is designed to measure the course woody debris (CWD) before and after the salvage. Permanent plots will be established prior to the salvage. Measurements at the plots to determine the amount, size and distribution of CWD within the salvage will be taken before and after the operation. While it has been determined that CWD is important to the Northern Spotted Owl, the quantity of CWD has never been established. Measurements of CWD before and after the salvage will create a baseline of data that will assist in determining if the salvage operation had a substantial impact on CWD over the length of a rotation.

1) Note existing or proposed protection measures, if any, for the complete proposal described in question A-11.
Species /Habitat: Marbled Murrelet. Protection Measures: Timing restrictions, flight restriction, and operating in non-habitat.
Species /Habitat: Northern Spotted Owl Protection Measures: CWD study, operating in non-habitat

6. Energy and Natural Resources

a. What kinds of energy (electric, natural gas, oil, wood stove, solar) will be used to meet the completed project's energy needs? Describe whether it will be used for heating, manufacturing, etc.
None

b. Would your project affect the potential use of solar energy by adjacent properties? If so, generally describe.
No

c. What kinds of energy conservation features are included in the plans of this proposal? List other proposed measures to reduce or control energy impacts, if any:
Does Not Apply

7. Environmental Health

a. Are there any environmental health hazards, including exposure to toxic chemicals, risk of fire and explosion, spill, or hazardous waste, that could occur as a result of this proposal? If so, describe.
Minimal hazard incidental to operating heavy machinery.

1) Describe special emergency services that might be required.
Fire suppression, hazardous waste cleanup.

2) Proposed measures to reduce or control environmental health hazards, if any:
The timber sale contract requires purchaser to minimize risk of fire and does not allow for disposal of any kind of waste on any State lands.

b. Noise

1) What types of noise exist in the area which may affect your project (for example: traffic, equipment, operation, other)?
None

2) What types and levels of noise would be created by or associated with the project on a short-term or long-term basis (for example: traffic, construction, operation, other)? Indicate what hours noise would come from this site.
Noise from helicopters and truck traffic during daylight hours while the sale is active.

3) Proposed measures to reduce or control noise impacts, if any:
Helicopter flight will have timing and directional restrictions applied to reduce impacts to the Marbled Murrelet habitat.

8. Land and Shoreline Use

a. What is the current use of the site and adjacent properties? *(Site includes the complete proposal, e.g. rock pits and access roads.)*
Timber Production

b. Has the site been used for agriculture? If so, describe.
No

c. Describe any structures on the site.
None

d. Will any structures be demolished? If so, what?
No

e. What is the current zoning classification of the site?
Jefferson County Timber Production

f. What is the current comprehensive plan designation of the site?
Jefferson County Timber Production

g. If applicable, what is the current shoreline master program designation of the site?
N/A

h. Has any part of the site been classified as an "environmentally sensitive" area? If so, specify.
No

i. Approximately how many people would reside or work in the completed project?
Does Not Apply

j. Approximately how many people would the completed project displace?
Does Not Apply

k. Proposed measures to avoid or reduce displacement impacts, if any:
None

l. Proposed measures to ensure the proposal is compatible with existing and projected land uses and plans, if any:
None

9. Housing

a. Approximately how many units would be provided, if any? Indicate whether high, middle, or low-income housing.
Does Not Apply

b. Approximately how many units, if any, would be eliminated? Indicate whether high, middle, or low-income housing.
Does Not Apply

c. Proposed measures to reduce or control housing impacts, if any:
None

10. Aesthetics

a. What is the tallest height of any proposed structure(s), not including antennas; what is the principle exterior building material(s) proposed?
Does Not Apply

b. What views in the immediate vicinity would be altered or obstructed?
As this proposal is a cedar salvage and most of the area is either advanced reproduction or heavy brush, the view should not be altered at all.

1) Is this proposal visible from a residential area, town, city, developed recreation site, or a scenic vista?
☒*No* ☐*Yes, viewing location:*

2) Is this proposal visible from a major transportation or designated scenic corridor (county road, state or interstate highway, US route, river, or Columbia Gorge SMA)?
☒*No* ☐*Yes, scenic corridor name:*

3) How will this proposal affect any views described in 1) or 2) above?
As noted above there should be no affect.

c. Proposed measures to reduce or control aesthetic impacts, if any:
None

11. Light and Glare

a. What type of light or glare will the proposal produce? What time of day would it mainly occur?
Does Not Apply

b. Could light or glare from the finished project be a safety hazard or interfere with views?
Does Not Apply

c. What existing off-site sources of light or glare may affect your proposal?
Does Not Apply

d. Proposed measures to reduce or control light and glare impacts, if any:
None

12. Recreation

a. What designated and informal recreational opportunities are in the immediate vicinity?
Dispersed informal recreation in the form of hunting, berry picking, sightseeing, etc.

b. Would the proposed project displace any existing recreational uses? If so, describe:
No

c. Proposed measures to reduce or control impacts on recreation, including recreation opportunities to be provided by the project or applicant, if any:
None

13. Historic and Cultural Preservation

a. Are there any places or objects listed on, or proposed for national, state, or local preservation registers known to be on or next to the site? If so, generally describe.
No

b. Generally describe any landmarks or evidence of historic, archaeological, scientific, or cultural importance known to be on or next to the site.
None

c. Proposed measures to reduce or control impacts, if any:
(Include all meetings or consultations with tribes, archaeologists, anthropologists or other authorities.)
None

14. Transportation

a. Identify public streets and highways serving the site, and describe proposed access to the existing street system. Show on site plans, if any.
The sale is accessed by the G-2000 logging road system from Highway 101.

1) Is it likely that this proposal will contribute to an existing safety, noise, dust, maintenance, or other transportation impact problem(s)? No

b. Is site currently served by public transit? If not, what is the approximate distance to the nearest transit stop?
No

c. How many parking spaces would the completed project have? How many would the project eliminate?
Does Not Apply

d. Will the proposal require any new roads or streets, or improvements to existing roads or streets, not including driveways? If so, generally describe (indicate whether public or private).
No

1) How does this proposal impact the overall transportation system/circulation in the surrounding area, if at all?
None

e. Will the project use (or occur in the immediate vicinity of) water, rail, or air transportation? If so, generally describe.
No

f. How many vehicular trips per day would be generated by the completed project? If known, indicate when peak volumes would occur.
None

g. Proposed measures to reduce or control transportation impacts, if any:
None

15. Public Services

a. Would the project result in an increased need for public services (for example: fire protection, police protection, health care, schools, other)? If so, generally describe.
No

b. Proposed measures to reduce or control direct impacts on public services, if any.
None

16. Utilities

a. Circle utilities currently available at the site: electricity, natural gas, water, refuse service, telephone, sanitary sewer, septic system, other.
Does not apply

b. Describe the utilities that are proposed for the project, the utility providing the service, and the general construction activities on the site or in the immediate vicinity which might be needed.
Does not apply

C. SIGNATURE

The above answers are true and complete to the best of my knowledge. I understand that the lead agency is relying on them to make its decision.

Completed by: _Brian Turner Date: 9/14/04 Title: Coast District Manager